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Redistributing the Cost of Inflation

STEPHEN A. CHAPLIN*

Given the current soar of inflation, it is impractical for contracts to be entered into under the presumption that the value of money remains constant. The author discusses how this risk of inflation may be shifted or shared, and stresses the important role index clauses may play in allocating this new risk.

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I. INTRODUCTION

At the writing of this article, inflation is at an annual rate of thirteen percent, with the purchasing power of the dollar at an alltime low.¹ Meanwhile, in the eyes of the law, the value of money

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1. Wall St. J., Sept. 24, 1979, at 1, col. 6. More important than the current rate of inflation is historic inflation. Since 1967 the Consumer Price Index, which measures the purchasing power of the dollar of consumer goods, has increased at an average rate of 6.3% per year. 102 MONTHLY LAB. REV. 92 (Mar. 1979).

remains constant.² It is fitting that the American symbol of law and justice wears a blindfold. But lawyers can no longer remain blind to the problem of inflation. To represent properly their clients, lawyers should have a basic understanding of what causes one party to an agreement to bear the entire risk of inflation and by what means this risk may be shifted or shared.³

There are numerous risks inherent in any contractual arrangement. These include risk of nonperformance or unsatisfactory performance, risks of theft or property damage during performance, risk of fraud and *risk of decrease in the value of performance before it is rendered*.⁴ In all but the last of these risk situations, the law generally places the responsibility associated with the risk either on the party who is better able to bear the loss or the party more in control of the factors which contribute to the loss. Although the law automatically allocates most risks, contracting parties will often either shift certain risks, or attempt to delineate more precisely the burdens associated with them. For example, losses resulting from nonperformance will usually fall on the party failing to perform because, generally, he has control over whether performance is properly rendered. Yet, in their contracts, parties often include provisions such as liquidated damages agreements to facilitate determination of losses, or suretyship agreements to guarantee performance. Likewise, by operation of law,⁵ the party controlling the bargained-for goods assumes the risk of damage or theft; however, insurance arrangements which may be contrary to or complementary to the law's allocation of risk are often included in the bargain.

By contrast, risks of fluctuations in the value of performance are rarely shifted in the bargaining process.⁶ Moreover, such risks are not allocated on the basis of who has control over the factors which cause the value of the other party's performance to change,

2. This is the nominal value theory or nominalistic principal of money. The nominal value theory essentially holds that a monetary obligation is legally satisfied by dollar for dollar payment even though the value of the dollar paid is not the same as when originally promised. F. MANN, *THE LEGAL ASPECT OF MONEY* (1953). The Supreme Court of the United States has recognized the principle of nominalism. *Nortz v. United States*, 294 U.S. 317 (1935); *Legal Tender Cases*, 79 U.S. (12 Wall.) 457, 548-49 (1870).

3. Although fluctuations in the value of money are one of the greatest risks involved in long term contracts, fluctuations in the cost and value of goods and services also constitute a sizeable risk to the parties of long term contracts. This article deals with all such value fluctuations.

4. See A. CORBIN, *CONTRACTS* § 598 (1952).

5. See, e.g., U.C.C. § 2-509 (where seller fails to deliver or tender goods in accordance with the terms of the contract, seller retains risks of loss).

6. This is evidenced by the pronounced scarcity of both consumer and commercial contracts which, by their terms, take inflationary factors into account.

or who is in the better position to bear the risk of these fluctuations. Rather, the determining factor is merely that one party has agreed to postpone receipt of the other's performance.

It has been said that one party to an agreement bears the entire risk of fluctuation in the value of performance because he has agreed to bear it.⁷ The most common example of this is the present transfer of money, goods or services in exchange for a promise of future payment of money. By agreeing to discharge the obligation in a fixed number of dollars with knowledge that the purchasing power of those dollars will probably change, the contracting parties implicitly agree that the recipient of those dollars bears the risk that they may decrease in value due to inflation. An obvious corollary to this view of nominalism⁸ is that contracting parties can readily alter their bargain to shift (or share) this risk of loss. The risk of changes in the value of promised future performance is by no means limited to decreases in the value of money owed. A contracting party who agrees to deliver goods or render services in the future, in exchange for present payment, bears the similar risk that the cost of future performance may increase substantially before it is due.⁹ Thus, because so many variables affecting the value of future performance are out of the parties' control, it seems unfair that the entire burden of losses due to value fluctuations should fall arbitrarily on one of the parties.

Parties may redistribute the risk of changes in the value of performance in a number of ways. In executory agreements, payment for the promised goods or services can either be tied to an independent formula which operates to raise and lower the price,¹⁰ or can be calculated on a cost-plus basis. Alternatively, parties can

7. Hauser, *The Use of Index Clauses in Private Loans*, 7 AM. J. COMP. L. 350 (1958). "Inasmuch as history has always shown that [fluctuations in money] can and do occur in any and all amounts, the courts have concluded that, in the absence of any provision to the contrary, the parties have accepted the risk that such changes shall operate again." *Id.* at 351.

8. See note 2 *supra*.

9. For example, a paper processing company which promises to supply a publisher's paper requirements for a 10 year period, at a fixed price, assumes the risk that its cost of production will remain fixed.

Changes in consumption or marketing patterns may cause shifts in supply and demand so that even if cost increases are provided for in the promise of future performance, the value of performance may increase or decrease at a different rate, or in a different direction than cost. See *McLouth Steel Corp. v. Jewell Coal & Coke Co.*, 570 F.2d 594 (6th Cir. 1978), in which a coal supplier attempted to escape its obligation under a requirements contract because coal prices on the open market far exceeded the price he was receiving under a cost-plus price formula.

10. That is, a formula by which parties attempt to "guesstimate" inflation.

simply shun any attempt to redistribute risk of value fluctuations by avoiding long term contracts and continually renegotiating short term contracts.¹¹ Nonexecutory agreements calling for future payment of money, such as loans or bond purchases, are normally restricted to adjustment by formula. Among the formulae available for adjusting payments are gold clauses, commodity clauses, foreign currency clauses and index clauses. A determination of which of these *value* clauses should be incorporated into the agreement will depend upon the needs of the parties.

A gold clause is a stipulation in an agreement which calls for payment of an obligation in that amount of gold which the original number of dollars owed would have purchased on the date the obligation was incurred.¹² Alternatively, such clauses call for payment of the original number of dollars owed should the value of the dollar, relative to gold, have increased. Likewise, a commodity clause ties repayment of dollars to the value of a named commodity, or group of commodities, making the value of the obligation dependent upon the quantity of a specified commodity which could be purchased with the original dollars owed on the date the obligation is due.¹³ Similarly, foreign currency clauses tie the repayment of an obligation to foreign currency exchange rates. The number of dollars owed is made dependent upon the amount of a named foreign currency which the original number of dollars could purchase on the date the obligation is due.¹⁴

None of the value clauses mentioned above measures the obligation in dollars per se; rather, the true value of the obligation is

11. One author has noted that:

Both guesstimating the rate of inflation and shunning fixed-price contracts have a number of undesirable features. The chances of correctly predicting the inflation rate are not especially good. Moreover, there is a tendency of the party with the greater leverage to tack on something extra, a practice which, taken in the aggregate, is likely to exacerbate existing inflationary pressures. Most people like to know how much something is going to cost before they order it. If all future price increases are shifted to him, the buyer may have justifiable concern about the sellers' honesty, or at least as to how much effort the seller will make to keep future cost increases to a minimum. Consequently, most parties prefer to maintain the real economic value of their contracts by inserting stabilization clauses.

Rosenn, *Protecting Contracts from Inflation*, 33 BUS. LAW. 729, 732 (1978).

12. Hirschberg, *The Gold Problem and Gold Value Clauses*, 16 S. TEX. L.J. 329 (1975). The following sample of a gold value clause appears in the introduction to the above article: "In the year 1979, this bond shall be redeemed by payment of One Thousand Dollars, or by delivery of the amount of gold One Thousand Dollars would have purchased in the year 1939, whichever is the greater." *Id.* at 329.

13. Rosenn, *supra* note 11, at 732.

14. *Id.* at 737. See also U.C.C. § 3-107(2) (1978 version) (providing that a "promise or order to pay a sum stated in a foreign currency is for a sum certain in money").

measured by the amount of some particular commodity (*e.g.*, gold, wheat, German marks) which the *original* dollars could purchase initially or when the obligation came due. Thus, although the purchasing power of the dollar is "preserved," it is preserved only *viz-à-viz* some commodity. Thus, the problem of inflation is conquered, but unless the chosen value clause measures the obligation by a commodity related to the promise, the benefits of using the clause will be lost. For example, a party may make periodic payments into an insurance policy, the proceeds of which he intends to be used to pay for his funeral expenses. If the amount of proceeds is tied to the value of wheat, the beneficiary of the policy is assured of receiving enough money to purchase the same amount of wheat as he could have at the time the insurance policy was created, but he would not necessarily receive enough money to pay for a funeral in his hometown. On the other hand, if the proceeds are tied to future changes in funeral costs,¹⁵ the insurance company's obligation will maintain a value commensurate with the insured's intended use of the proceeds.

To protect properly against the changing value of obligations, the agreement should provide for periodic revaluation of the goods, services or money bargained for, to reflect their value *to the party receiving them*. The use to which the recipient intends to put the goods, services or money received should control. Gold, commodity and foreign currency clauses only reflect a narrow set of subsequent uses for goods and money received by the promisee. By contrast, index clauses allow for latitude in measuring the value of goods, services or money in the hands of the promisee.

Index clauses link the price of goods and services to their current market values.¹⁶ These clauses are relatively simple to draft,

15. One way of measuring changes in funeral costs over time is by computing the average of several indices compiled by the Bureau of Labor Statistics (hereinafter cited as B.L.S.), giving each index a weight equivalent to the portion of a funeral the indexed commodity represents. For example, one might use a combination of the index of weekly earnings in service industries (B.L.S. CURRENT LABOR STATISTICS, *weekly earnings, by industry division and major manufacturing group* table), the average cost of renting an automobile (B.L.S. CURRENT LABOR STATISTICS *Consumer Price Index, U.S. city average, TRANSPORTATION: automobile rental, registration, and other fees*) and the price index for burial caskets (B.L.S. CURRENT LABOR STATISTICS, *price indexes for the output of selected SIC industries, #3995*). A simpler, but less accurate way to index our insurance policy would be to tie the proceeds either to the "all commodities" group of the Producer Price Index (B.L.S. CURRENT LABOR STATISTICS, *Producer Price Indexes, by commodity grouping*) or to the "services" group of the Consumer Price Index (B.L.S. CURRENT LABOR STATISTICS, U.S. city average, general summary and selected items).

16. See Hirschberg, *Value Clauses—Forms of Contractual Protection Against Changes in the Value of Money*, 79 Com. L.J. 350 (1974).

especially in nonsophisticated agreements, and can be constructed so lawyer interpretation is unnecessary. The Bureau of Labor Statistics publishes a wide variety of indices adequate to provide most contracting parties a way of measuring current values of many goods and services. These indices are published on a regular basis and are readily accessible.¹⁷

Index clauses are most useful in long term agreements where the risk of significant fluctuations in the price of goods or services or the value of money is the greatest. The particular types of agreements in which index clauses would be especially helpful include bonds, commercial leases, loans, construction and building contracts, maintenance contracts, long term sales contracts and insurance contracts.¹⁸ Although the use of index clauses in most of these agreements will generally only require an evaluation of the needs and sophistication of the parties, serious legal constraints are presented by a few types of index clauses.¹⁹ Part II of this article discusses the most important of these constraints. Part III includes information and suggestions important in the actual drafting of index clauses.

II. LEGAL CONSIDERATIONS IN DRAFTING AND USING INDEX CLAUSES

An analysis of the legal considerations in using index clauses is divided into two parts: (1) potential legal problems inherent in the use of index clauses in any type of agreement, and (2) legal obstacles presented by particular types of long term agreements.

A. General Legal Considerations

Perhaps the greatest potential obstacle in using index clauses arises from notions that such provisions may be inflationary or may undermine the soundness of the dollar. While the economic considerations are beyond the scope of this article, the belief that index clauses are inflationary²⁰ appears to be mainly intuitive, and is not

17. The B.L.S. comprehensive list of *Current Labor Statistics* is published monthly in the *Monthly Labor Review*.

18. For other suggested uses for index clauses, see McKay, *The Legal Problems of Inflation*, 1975 N.Z.L.J. 395; Pasquersi, *Protecting Clients from Inflation*, 19:6 PRAC. LAW. 83 (1973).

19. The most salient example is the potential destruction of the negotiability of commercial paper which includes an index clause.

20. It should be noted that structuring a long term contract so that both parties share the risk of inflation, or so that the risk shifts from one party to the other, is not the same as including a clause which "guesstimates" or anticipates inflation. The latter can certainly be considered inflationary.

supported by empirical data.²¹ Moreover, any attempt by the courts to hinder the use of index clauses is limited by the absence of a statute on which an adverse decision could be based. The gold clause resolution, prior to its repeal, served as a possible basis for such an adverse ruling.²² Although most authorities agreed that the gold clause resolution was not intended to prohibit the use of index clauses,²³ two courts explicitly held otherwise.²⁴ Today, only indexed agreements made prior to the effective date of the repeal of the gold clause resolution²⁵ are subject to any adverse ruling under it.

An argument may be made, however, that index clauses undermine the soundness of the dollar in contravention of the "Legal Tender Acts."²⁶ The Legal Tender Acts are aimed at establishing the dollar as the national currency and ensuring the soundness of the dollar.²⁷ It may be argued that index clauses, requiring payment in "indexed dollars" rather than dollar for dollar, call into question the soundness of the dollar. Again, while economic analysis is beyond the scope of this article, it is clear that shifting or sharing the risk of inflation in no way calls for repayment in any form of currency other than the dollar.²⁸

It might be suggested that the prohibition against unconscionable contracts and clauses²⁹ in the Uniform Commercial Code

21. One economist has suggested that wide adoption of index clauses might militate against inflation by decreasing consumption and credit buying. Hauser, *supra* note 7, at 362-63.

22. 31 U.S.C. § 463 (in which the 73d Congress proscribed the use of gold clauses in domestic contracts) (repealed by Pub. L. No. 95-147, § 4(c), 91 Stat. 1229 (1977)).

23. Dach, *Validity of Price-Index Clauses*, 13 GEO. WASH. L. REV. 328 (1945); Comment, *The Probable Legal Consequences of Inserting Price-Index Clauses in Long-Term Corporate Obligations*, 18 HASTINGS L.J. 959 (1967); Rosenn, *supra* note 11.

24. *Shaughnessy v. REC Centers, Inc.*, 361 So. 2d 807 (Fla. 4th DCA 1978); *Aztec Prop., Inc. v. Union Planters Nat'l Bank*, 530 S.W.2d 756 (Tenn. 1975), *cert. denied*, 425 U.S. 975 (1976).

25. *I.e.*, October 28, 1977.

26. 31 U.S.C. §§ 451-463 (1970).

27. *E.g.*, 31 U.S.C. § 456. See also *Webber v. American Union Bank*, 128 Misc. 123, 217 N.Y.S. 833 (App. Term 1926) (receipt of deposits of foreign money and payment thereof is against public policy).

28. When faced with the question whether index clauses contravened the French legal tender acts, the highest court of France held they did not. See Hauser, *Index Clause*, 13 AM. J. COMP. L. 606, 606 (1964) (citing Judgment of June 27, 1957, Cass. Civ. 1re, [1957] *Juris-Classeur periodique, la semaine juridique* [J.C.P.] II 10093bis). But, less than one year after the Court de Cassation handed down this decision, the newly installed government of the Fifth Republic passed a law banning the use of index clauses.

The high court of Australia has also concluded that indexing obligations does not alter the medium of exchange and therefore does not contravene legal tender acts in Australia. See McKay, *supra* note 18, at 400 n.15 (citing *Stanwell Park Hotel Co. v. Leslie*, 85 C.L.R. 189 (Austl. 1952)).

29. If the court as a matter of law finds the contract or any clause of the

(UCC) presents a legal obstacle to index clauses in consumer contracts. For example, a bank which lends a consumer the purchase price of a new home, stipulating in the loan agreement that an index clause will require the borrower to bear the entire risk of increases in principal owed, may be construed as unfairly binding the consumer to a one-sided agreement. The UCC answers such a challenge: "The principle is one of prevention of oppression and unfair surprise . . . and not of disturbance of allocation of risks because of superior bargaining power."³⁰

One final general legal consideration involves the Truth in Lending Act.³¹ While the Act poses no legal obstacle to using index clauses, it is important to note that it requires disclosure of the nature of the indexing agreement in accordance with its disclosure provisions.³²

B. *Legal Considerations Involved in Specific Types of Agreements*

Of the legal implications presented by specific types of agreements, impairment of negotiability of indexed investment securities and indexed commercial paper is perhaps the most significant. Because negotiability of commercial paper involves different considerations than negotiability of investment securities,³³ the two will be discussed separately.

To be considered a negotiable instrument under Article 3 of the UCC, a writing must contain "an unconditional promise or order to pay a sum certain in money"³⁴ A promissory note calling for payment of a stated sum multiplied by a specified index ratio³⁵ would appear to contravene the "sum certain" requirement of section 3-104, as a holder would have to look beyond the face of the instrument to determine the amount owed.³⁶ Although violation of

contract to have been unconscionable at the time it was made the court may refuse to enforce the contract, or it may enforce the remainder of the contract without the unconscionable clause, or it may so limit the application of any unconscionable clause as to avoid any unconscionable result.

U.C.C. § 2-302(1) (1978 version) (emphasis added).

30. U.C.C. § 2-302, Comment 1 (1978 version) (emphasis added) (citation omitted).

31. Truth in Lending Act, 15 U.S.C. §§ 1601-1677 (1976).

32. 15 U.S.C. §§ 1631-1644; 12 C.F.R. § 226 (1974) (Regulation Z). See also Hyer & Kearn, *Legal Impediments to Mortgage Innovation*, 6 REAL EST. L.J. 211, 234 (1978).

33. See note 67 and accompanying text *infra*.

34. U.C.C. § 3-104(1)(b) (1978 version).

35. E.g., dollars loaned times CPI at maturity date divided by CPI on date issued.

36. Defining sum certain, U.C.C. § 3-106 Comment 1 (1978 version) states: "The computation must be one which can be made from the instrument itself without reference to any outside source"

the "sum certain" requirement of section 3-104 would destroy negotiability of the instrument within Article 3, it may, however, be argued that it would not destroy negotiability entirely.

A number of writers have concluded that failure of an instrument to meet Article 3 negotiability requirements would imply the instrument was non-negotiable for all purposes.³⁷ But several authors have argued that an instrument can be negotiable notwithstanding its non-negotiability under Article 3.³⁸ Although there has been no case on point, a court convinced of the usefulness of indexing would have little difficulty holding commercial paper containing an index clause negotiable. Article 3 leaves open the possibility that "some writings may be made negotiable by other statutes or by judicial decision. The same is true as to any new type of paper which commercial practice may develop in the future."³⁹

One author has asserted that the "certainty of sum" requirement exists "because the present value of an instrument cannot be determined unless the amount of the future obligation is known, and known presently. *Only with this knowledge can discounting be done rationally.*"⁴⁰ In periods of high inflation, however, it is difficult to see how promissory notes which are not indexed can be discounted with any degree of certainty or rationality. A clause which stabilizes the real value of the principal of a promissory note would undoubtedly increase the certainty of the discounting process.⁴¹

The negotiability of commercial instruments containing index clauses may also be justified by analogizing them to foreign currency clauses. The latter do not destroy negotiability under Article 3. Subsection 3-107(2) provides that "[a] promise or order to pay a sum stated in a foreign currency is for a sum certain in money" It may be argued that a foreign currency provision is nothing more than a specialized form of index clause; both subject a princi-

37. Dawson & Coultrap, *Contracting by Reference to Price Indices*, 33 MICH. L. REV. 685, 698 (1935); Hyer & Kearn *supra* note 32, at 231; Nussbaum, *Multiple Currency and Index Clauses*, 84 U. PA. L. REV. 569, 594 (1936); Rosenn, *supra* note 11, at 746.

38. Hauser, *supra* note 7, at 358; Hirschberg, *Index Value Clauses*, 88 BANKING L.J. 867, 873 (1971); Comment, *supra* note 23, at 967-68.

39. U.C.C. § 3-104, Comment 1 (1978 version) (emphasis added). While the comment provides for the "possibility that some writings may be made negotiable by other statutes or by judicial decision," it suggests no criteria upon which negotiability outside Article 3 would be based.

40. W. HAWKLAND, *CASES AND MATERIALS ON COMMERCIAL PAPER AND BANK DEPOSITS AND COLLECTIONS* 40 (1967) (emphasis added).

41. Comment, *supra* note 23, at 968. A better way to ensure the negotiability of indexed commercial paper would be to draft the index clause so that the face value of the paper could never drop below the dollar amount for which it was issued.

pal debt to valuation under a constantly fluctuating scale. In neither instance is the principal sum determinable solely from the face of the instrument. As both types of provisions can be said to operate similarly, there is no reason why index clauses should destroy negotiability while foreign currency clauses do not.⁴² Moreover, index clauses probably have a less detrimental effect on the discounting process than do foreign currency clauses. Again, it has been suggested that the chief concern underlying the "sum certain" requirement lies in facilitating the discounting process.⁴³ It is arguable from a commercial policy standpoint that most discounting banks in the United States are more concerned with the real domestic value of their receivables than with the value of their receivables on foreign exchange markets.

Usury may also present a legal impediment to indexing of loan agreements. Approximately forty-eight jurisdictions in the United States prohibit the charging of interest above a set percentage rate.⁴⁴ Whether an indexed loan agreement violates a given jurisdiction's usury laws depends upon a number of factors. First, in a loan agreement, either principal or interest, or both, may be indexed.⁴⁵ If interest alone is indexed, but the index clause limits interest charges to "current" statutory ceilings, usury obstacles would be avoided.⁴⁶ If principal alone or principal in conjunction with interest is indexed, the same logic would apply. Thus, any increase in the principal obligation resulting from increases in the specified index should not violate usury laws as long as the rate of interest charged on the increased principal amount does not exceed the rate set by statute. Unfortunately, in the two cases decided on this point in the United States,⁴⁷ logic was displaced by an apparent dislike for indexed loans.

42. *Id.* at 969.

43. See note 36 and accompanying text *supra*.

44. 1 CONS. CRED. GUIDE (CCH) ¶ 510 (1980). As used in this article, usury laws refer to the maximum interest charge which the law allows contracting parties to agree upon, also referred to as the contract rate.

45. For an in-depth analysis of the different legal and economic effects involved in indexing principal versus indexing interest in real estate mortgages, see Hyer & Kearn, *supra* note 32.

46. But then, very sticky problems of negotiability arise. In a loan agreement which indexes the interest rate charged, but limits the rate to "current statutory ceilings," the sum payable under the loan would likely violate the sum certain requirement. Article 3 explicitly states that notes payable with interest "at the current rate" are non-negotiable. U.C.C. § 3-106, Comment 1 (1978 version).

47. *Olwine v. Torrens*, 236 Pa. Super. Ct. 51, 344 A.2d 665 (1975); *Aztec Prop., Inc. v. Union Planters Nat'l Bank*, 530 S.W.2d 756 (Tenn. 1975), *cert. denied*, 425 U.S. 975 (1976).

In *Aztec Properties, Inc. v. Union Planters National Bank*,⁴⁸ the Supreme Court of Tennessee noted that "[t]he interest charged by a lender is . . . compensation [both] for the use of money and for bearing the risk that . . . the principal might depreciate in value."⁴⁹ The court reasoned that because "the lender has long borne the risk of inflation in this state,"⁵⁰ shifting the risk to the borrower without giving him corresponding relief from part of the interest charge⁵¹ constituted usurious interest.⁵² The logic of the court seemed to rest on the idea that the Tennessee Legislature, in drafting the state usury laws, contemplated that the ceiling on interest charges would not only allow lenders to recoup their reasonable expenses in conducting business and still make a profit, but would be high enough to allow for the costs associated with bearing the risk of inflation. Because lenders have always borne the risk of inflation⁵³ it is arguable that the Tennessee Legislature did take into consideration the cost to lenders of bearing this risk. Even assuming these costs were implicitly considered along with all other costs of lending, nevertheless, the nature⁵⁴ and extent⁵⁵ of the risk of inflation has changed so significantly in recent years⁵⁶ that it is improbable that the legislature intended for lenders to bear so substantial a risk within the confines of unchanging interest limitations.

Indexed loan agreements may also conflict with federal or state savings and loan laws. Federal regulation effectively prohibits federally chartered savings and loan institutions from mortgaging notes with indexed principal or indexed interest.⁵⁷ State savings and

48. 530 S.W.2d 756 (Tenn. 1975), *cert. denied*, 425 U.S. 975 (1976).

49. *Id.* at 759.

50. *Id.*

51. The maximum legal rate of interest chargeable in Tennessee was 10% per annum. 530 S.W. 2d at 757 (citing TENN. CODE ANN. § 47-14-104).

52. Because the note executed by Aztec Properties bore an interest rate of 10%, and the maximum rate allowed by statute was 10%, the court implicitly reasoned that if Aztec was going to shift the risk of inflation to Union Planters, this shift should have been reflected in a corresponding decrease in the interest rate charged to some amount below the maximum. 530 S.W.2d at 759.

53. See note 2 *supra*. The nominalistic principle perhaps has the most serious effect on long term money lenders.

54. The *nature* of inflation has changed such that it is no longer a question of whether prices will rise in a given year (as it might have been when usury laws were first drafted); rather, the only real question is how much prices will rise.

55. The *extent* of inflation (i.e., annual inflation percentage rates) is greater now than at any time since World War II. B.L.S. Consumer Price Index July 1976; Hirschberg, *supra* note 16, at 351.

56. Wash. Post, July 27, 1979, at 1, col. 5.

57. 12 C.F.R. § 541.14(a) (1979), which prohibits increasing the amount of monthly payments, in conjunction with 12 C.F.R. § 545.6-1a (1979), which limits conventional mort-

loan laws vary. While several jurisdictions explicitly prohibit savings and loans from using any form of indexing in conjunction with mortgage lending,⁵⁸ other jurisdictions explicitly allow the use of index clauses.⁵⁹ Savings and loan laws in most jurisdictions, however, are silent on the matter.

Finally, indexing loan agreements may present problems involving priority among secured lenders. Money owed under long term loan agreements is often secured by the borrower's collateral. When an index clause included in a loan agreement causes the principal obligation to increase, one might question whether the lender's security interest increases correspondingly, and whether his security interest in the increased amount maintains the same priority as the original amount.

An indexed loan, whether secured by chattels, or by mortgaged real estate, gives rise to two related problems: First, subsequent lenders may not be willing to lend against the same collateral; and second, it may be unclear whether the initial lender or a subsequent lender has priority over property secured under that portion of the principal obligation which arose by operation of the index clause. While these two situations present distinct sets of practical problems, they present the same legal problem.⁶⁰ Suppose First Bank holds a twenty-year mortgage upon real estate, and, pursuant to an index clause contained in the corresponding loan agreement, the balance of the principal owed has been increased periodically as a result of increases in the named index. Ten years later, Second Bank loans money to the owner of the real estate taking a second mortgage; at that time the principal owed under the original agreement has increased by \$1,000 pursuant to the index clause. Suppose further, that at the time of foreclosure three years later, the principal owed to First Bank has increased by another \$500. In the above situation, First Bank's security interest should be given priority over Second Bank to the entire extent of the principal owed First Bank. When Second Bank searched the title to the property, it should have found First Bank's mortgage. In order to determine the extent of First Bank's interest, Second Bank would have inquired into the terms of the original loan agreement. It would certainly place no added burden on Second Bank to put it on inquiry about the possi-

gages to 30 years, may make indexed mortgaged loans very impractical. See Hyer & Kearn, *supra* note 32, at 220.

58. See, e.g., MICH. COMP. LAWS § 438.31 (1978).

59. See, e.g., CAL. CIV. CODE § 1916.5 (West 1974).

60. The legal problems here may be compounded for some people if the original security interest is in the form of a floating lien.

bility that First Bank's security interest might increase. Thus, First Bank should have priority to the extent of the entire outstanding principal. Until there are some cases on this point, however, this result is only speculation.

A similar result should be reached under the UCC with regard to indexed loan agreements secured by personalty. Assuming a lender's original security interest is perfected, the interest subsequently secured⁶¹ due to increases in the principal debt should be given priority over subsequent non-purchase money lenders under subsections 9-312(5) and 9-312(7) of the UCC. Subsection 9-312(5) establishes the basic "first in time" rule of priority among parties secured by the same collateral: "Priority dates from the time a filing is first made covering the collateral or the time the security interest is first perfected, whichever is earlier [When] conflicting security interests are unperfected, the first to attach has priority."⁶² Subsection 9-312(7) makes it clear that once a lienor has priority because of his "first in time" status, future advances made while a security interest is perfected give the security interest the same priority with respect to future advances as with respect to the first advance.⁶³ Arguably, fluctuations in principal debt due to the operation of an index clause are merely another form of "future advance" differing from the usual advance only in that there is no physical transfer of money. Accordingly, courts should treat priority questions which arise from the operation of index clauses the same as they treat priority questions arising from future advances.

The question whether investment securities which include index clauses will be deemed negotiable has been addressed by several authors.⁶⁴ Although negotiability of such securities has been endorsed,⁶⁵ no author has yet taken the position that United States courts would deem them negotiable.⁶⁶ The determination of negotiability for Article 8 investment securities, as opposed to Article 3 commercial paper, involves different variables; Article 8 is controlling with respect to negotiability of investment securities.⁶⁷ Section

61. Interest may be secured pursuant to appropriate language both in the security agreement and in the index clause.

62. U.C.C. § 9-312(5)(a)-(b) (1978 version).

63. U.C.C. § 9-312(7) (1978 version).

64. Dawson & Coultrap, *supra* note 37; Comment, *supra* note 23.

65. Comment, *supra* note 23.

66. *But see* Hirschberg, *Index Value Clauses—The Israeli Experience*, 92 *BANKING L.J.* 158 (1975). "In Israel, index linked bonds are practically the only form of long-range investment in bonds for the duration of two years or more." *Id.* at 160.

67. U.C.C. § 3-103(1) ("This Article does not apply to . . . investment securities."); U.C.C. § 8-102, Comment 4, "A certificated security is a negotiable instrument but is none-

8-102 provides that a certificated security" is an "interest in property of or an enterprise of . . . or an obligation of the issuer which [*inter alia*] is . . . of a type commonly dealt in on securities exchanges or markets or commonly recognized in any area in which it is issued or dealt in as a medium for investment"⁶⁸ Subsection 8-105(1) provides that "[c]ertificated securities governed by this Article are negotiable instruments." At first glance it may appear that for an instrument to be deemed a "certificated security" and thus negotiable, it would have to be in all respects "common" to the securities markets.⁶⁹ A closer analysis of the comments to Article 8, however, reveals that this is not what the drafters had in mind. The requirement that an obligation be "of a type commonly dealt in on securities exchanges"⁷⁰ essentially means that the property interest represented by the instrument, rather than the form of the instrument, be common to securities markets. This interpretation is supported by the comment to section 8-102: "It is believed that the definition [of a security] will cover anything which securities markets . . . are *likely to regard as suitable for trading*."⁷¹ An argument that a different variety of investment instrument would not be considered a "security" within Article 8 "until enough time had elapsed for the instrument to become commonly recognized in investment circles"⁷² misses the point. If every new variety of investment security were subject to such "time worthiness" constraints, new varieties of investment securities would certainly be scarce because they would face the insurmountable constraint of being non-negotiable. Whether an indexed bond will be considered a "security" within Article 8, and thus negotiable, should turn on whether the type of property interest represented by the bond is one commonly recognized in securities markets, and not whether it is common in form. Therefore, standard debt instruments which include index clauses should be deemed negotiable.

theless governed by this Article rather than by Article 3" (citation omitted).

68. U.C.C. § 8-102(1)(a) (1978 version).

69. See Comment, *supra* note 23, at 970.

70. U.C.C. § 8-102(1)(a)(ii) (1978 version). The negotiability of indexed bonds will shortly be tested. The current rise in the price of precious metals has spurred the Sunshine Silver Mining Co., this country's largest silver mine, to issue silver-backed bonds. The bonds, which are to go on sale in March 1980, will be due March 1, 1995, will pay interest and will be redeemable at either \$1,000 or the price of a certain number of troy ounces of silver bullion, whichever is greater. *TIME*, Feb. 18, 1980, at 72.

71. U.C.C. § 8-102, Comment 2 (1978 version) (emphasis added).

72. Comment, *supra* note 23, at 970.

III. DRAFTING INDEX CLAUSES: PRACTICAL CONSIDERATIONS

A. Indices Available

It is important for contracting parties to choose an index which is appropriate to their needs, reliable and easily accessible.⁷³ Toward this end there is currently a wide variety of indices regularly published by both government and private institutions.⁷⁴ While many are well established and may be obtained from a number of sources, perhaps the most reliable indices are those published by the Bureau of Labor Statistics. The price indices published by the Bureau, because they encompass such a broad grouping of goods and services, will probably satisfy the needs of most parties.

In compiling its price indices, the Bureau of Labor Statistics gathers price data from retail and primary markets in the United States and calculates the indices on a monthly basis.⁷⁵ The two basic sets of indices published by the Bureau are the Consumer Price Index (hereinafter CPI) and Producer Price Index (hereinafter PPI). The CPI also known as the Cost-of-Living Index, "is a monthly statistical measure of the average change in prices in a fixed market basket of goods and services"⁷⁶ The PPI measures "average changes in prices received in primary markets of the United States by producers of commodities in all stages of processing."⁷⁷ The price data included in these two sets of indices are broken down into a wide variety of groups⁷⁸ and subgroups.⁷⁹ Whether the contracting parties will choose a narrow subgroup index or a broader composite index will depend upon the intended use of the money, goods or services to be received.⁸⁰

There are two important characteristics of price indices which deserve emphasis. First, a glance at a set of index tables reveals the wide variety of forms in which an index is available. Referring to an index without specifying which form is intended is an invitation to litigation. Therefore, drafters must be precise in specifying exactly which form of the index is to be used.⁸¹ Second, an index may or may

73. See text accompanying note 84 *infra*.

74. *E.g.*, The Bureau of Labor Statistics puts out the largest variety of indices of any governmental agency; DUN AND BRADSTREET Monthly Indices.

75. See, *e.g.*, 102 MONTHLY LAB. REV. at 92-106 (Mar. 1979).

76. *Id.* at 92.

77. *Id.*

78. *E.g.*, food, transportation and services.

79. *E.g.*, sugar, automobiles, automobile rental and burial caskets.

80. See note 15 and accompanying text *supra*. Because of the wide variety of indices published by the Bureau of Labor Statistics, price changes can be calculated for an infinite number of contracting parties' needs.

81. See *Department of Water & Power v. Okonite-Callender Cable Co.*, 181 F.2d 375 (9th

not be sufficiently current when published to be of much use to the parties. Whether an index is current is a function of how often it is calculated and where it is published. For example, the implicit Gross National Product (hereinafter GNP) deflator, which many consider the best measure of the general value of money, takes so long to compute due to its complexity⁸² that it may be several months old before it is available.⁸³ Additionally, subgroups of the CPI, even though they are computed monthly, are not published by the Department of Labor until two or three months after they are calculated. In the sections which follow, a number of considerations concerning choice and use of indices will be discussed.

B. *Suggested Rules on Drafting*

1. THE INDEX CHOSEN BY THE PARTIES SHOULD BE THE ONE MOST APPROPRIATE TO THEIR NEEDS

Of primary importance in indexing an agreement is making certain that the goods, services or money to be received maintain their value to the recipient.⁸⁴ Again, the purpose of indexing is to ensure that what the promisee receives has the same value to him when received as it had at the time it was originally bargained for. To accomplish this purpose, parties should choose an index which reflects the intended use of the commodity to be received. For example, a bank which loans money to a consumer for the purchase of a home would want the principal sum it will receive in repayment to maintain its general economic value. Therefore, the most appropriate index may be the implicit GNP deflator, which reflects changes in the value of the dollar across the entire economy.⁸⁵ Likewise, a person who establishes an annuity for retirement purposes would want the money he will receive in the future to retain its present purchasing power with respect to consumer goods and services. In this case, the CPI may be the most appropriate index, because it reflects consumer purchasing power of money.⁸⁶

Choosing the most appropriate index will be relatively simple when the contract is nonexecutory, because only one party needs

Cir. 1950), wherein the court held that an imprecisely drafted index clause had been intended to refer to a component index rather than a group index. It is unclear whether the court's interpretation of the contract was in agreement with the parties' original intent. What is clear is that costly litigation could have been avoided by more precise draftsmanship.

82. Rosenn, *supra* note 11, at 738 n.35.

83. *Id.* at 744-45.

84. See notes 15-16 and accompanying text *supra*.

85. See Rosenn, *supra* note 11, at 738 n.35.

86. *Id.*

protection against fluctuation in the value of its future receipts. In executory agreements, however, each party may have a different interest to protect from inflation. For example, in a long term lease agreement of farmland to a cotton farmer, the lessor may want rental payments to maintain their general economic value, while the lessee may want his payments to reflect the value of the land to him. Because the farmer will be using the land for raising cotton, the best measure of the land will be the price the farmer can get for his cotton. Assuming the parties have equal bargaining power, a compromise may be struck by indexing lease payments to the *average* of the implicit GNP deflator and the wholesale index of cotton prices.

2. CHOOSE A WELL ESTABLISHED, EASILY
ACCESSIBLE INDEX WHICH IS PUBLISHED
AT INTERVALS ADAPTABLE TO THE PAYMENT
SCHEDULE OF THE AGREEMENT

Unsophisticated parties should probably use only the most commonly known indices, because these are well established, easily accessible and regularly published. It is important that the index be well established to avoid the contingency of its ceasing to be published. It is also important that the index be published often enough so that it does not impede payment scheduling and is not too stale when published. This is especially true in executory contracts which call for regularly scheduled payments. For example, if payment under such a contract were to be adjusted annually, over a ten year period, the named index would have to be available on about the same date each year so that the necessary adjustment could be made without dispute over prospective or retroactive application of late or early published indices.

3. INDICATE TO WHAT EXTENT THE OBLIGATION WILL
VARY WITH FLUCTUATIONS IN THE INDEX

Depending upon their respective bargaining powers, the parties may agree to share the risk of inflation equally, or the party who would normally have borne the entire risk of inflation may have sufficient bargaining power to shift the risk entirely to the other party;⁸⁷ or parties may enter into an agreement, similar to insurance

87. The ability to shift the entire burden of inflation to another party merely by one's superior bargaining power should not necessarily be characterized as an unfair bargain. In many instances such a shift would result in shifting the risk to the party better able to bear it. For example, in a home mortgage loan, lenders, who normally bear inflationary risks,

deductibles, whereby one party bears the risk of value fluctuations up to an agreed point, and the other party bears the risk over and above that point. This third method is the most commonly used indexing agreement.⁸⁸ Essentially it entails wording the index clause so that it is only triggered when the agreed upon index moves a predetermined number of points. Thus, no adjustment in the obligation is made until market fluctuations have become greater than generally anticipated; at that point, either the entire burden or an agreed upon portion of it shifts from one party to the other.

4. THE INDEX FORMULA SHOULD WORK AS SIMPLY AS POSSIBLE

Costly litigation could arise any time the index formula used in the agreement is susceptible to more than one interpretation.⁸⁹ Thus, one of the objectives in drafting an index clause should be to make the index formula understandable to laymen and lawyers alike. Simplicity and clarity are most important when an index clause is included in commercial paper. As pointed out earlier, it is uncertain whether courts will declare commercial paper which includes an index clause negotiable.⁹⁰ To facilitate the discounting process and thereby increase the chances of such instruments being considered negotiable, the index formula used should operate as simply as a foreign currency clause.⁹¹

5. INDICATE PRECISELY WHICH PARTS OF THE AGREEMENT ARE SUBJECT TO THE INDEX

A long term agreement may call for the delivery of a variety of goods, performance of a number of different services, or payment of money for both principal and collateral obligations. Any one or more of these obligations is subject to indexing. For example, in a loan agreement, either interest or principal or both may be indexed. The index agreement, therefore, must indicate what items are subject to being indexed and how each is indexed. Where the agreement, such

cannot offset the added cost associated with loss in value of the principal owed by the borrower. On the other hand, borrowers' wages tend to keep pace with inflation, putting them in a better position to pay increases in principal which rises with inflation under an index clause.

88. Rosenn, *supra* note 11, at 740.

89. See Department of Water & Power v. Okonite-Callender Cable Co., 181 F.2d 375 (9th Cir. 1950).

90. See note 36 and accompanying text *supra*.

91. As was stated in note 41 *supra*, indexed commercial paper is far more likely to be considered negotiable by the courts if the index clause includes a provision that the face value of the note cannot drop below the original dollar amount for which the paper was issued.

as a long term building contract, involves the sale and performance of a number of goods and services, the index agreement should list each element that will be subject to the index, and should contain a clause which excludes all goods or services not so listed.⁹²

6. THE INDEX CLAUSE SHOULD SPECIFY PRECISELY
WHAT INDEX THE AGREEMENT IS SUBJECT TO, WHAT
EVENT TRIGGERS ADJUSTMENTS IN THE OBLIGATION
AND HOW OFTEN THESE ADJUSTMENTS ARE TO BE MADE

It is essential to choose the index most appropriate to the needs of the parties and to specify the index precisely.⁹³ For example, the regional (as opposed to national) index may better reflect the supply, demand and cost factors of the goods contracted for where purchase of the goods is usually restricted to a particular region. Moreover, many of the indices published by the Bureau of Labor Statistics are broken down into various component indices, and some may be seasonally or nonseasonally adjusted.⁹⁴ Thus, an index clause could specify that the index to be used is the "regional, overall, seasonally adjusted" version.

The index clause should also specify what event triggers an adjustment in the obligation and how often the adjustment is to be made. As discussed above, most indexed agreements provide that one party bear the risk of inflation only up to a specified point.⁹⁵ Parties often agree that, for purposes of keeping administrative costs low, no adjustments will be made unless and until the index moves more than a certain number of points within a specified period.⁹⁶ Where the agreement is executory, the parties may also keep administrative costs low by specifying that adjustments will only be made on a semiannual or quarterly basis even though the

92. See *S.D. Hicks & Son Co. v. J.T. Baker Chem. Co.*, 307 F.2d 750 (2d Cir. 1962). The case involved a contract for the construction of a chemical plant, which included construction of a building and a processing plant; the contract was subject to an index clause, but because of poor drafting it was unclear whether the index clause applied to both the building and the processing plant. The court held that the index clause applied only to the processing plant, forcing Hicks & Son to bear substantial added construction costs.

93. In *United States v. Newport News Shipbuilding & Dry Dock Co.*, 571 F.2d 1283 (4th Cir. 1978), in which the court found no binding agreement had been reached, a disagreement arose as to whether *regional costs* or a Bureau of Labor Statistics index based on *national price levels* was to be used in computing payment under a shipbuilding agreement. The difference between calculation using regional costs versus the national index meant a \$9.4 million difference in payment.

94. See 102 MONTHLY LAB. REV. at 92-106 (Mar. 1979).

95. See note 88 and accompanying text *supra*.

96. Rosenn, *supra* note 11, at 740.

named index is published more frequently.⁹⁷ In any event, even when adjustments are to be made each time the index is published, the index clause should specify this.

7. THE INDEX CLAUSE SHOULD BE DRAFTED SO
THAT PROVISIONS ARE MADE FOR ALL REASONABLY
FORESEEABLE CONTINGENCIES

Parties should not ignore future events which may impede the intended operation of the indexing agreement even where the probability of their occurrence seems slight. The contingencies which might impede smooth operation of the index clause may be classified under two headings: Events which affect the goods and services bargained for and events which affect the index itself.

Parties to a long term agreement generally anticipate that even though the price of goods and services bargained for will probably fluctuate, the factors which cause these price fluctuations will remain the same. For example, parties to a requirements contract for the sale of fuel oil by a domestic producer may anticipate that government price controls, rather than external market forces, will continue to be the major factor affecting oil prices. Should government regulation of domestic oil prices cease, or be relaxed, one of the parties may suffer significant losses because it is unable to alter its selling or purchasing habits. Neither party should bear the brunt of such a change.⁹⁸ The opposite circumstance is also possible; prices controlled by general market forces at the time the agreement was entered into may later be the subject of strict government controls. Another contingency which may affect the value of goods bargained for is an imposition of or increase in a sales or use tax upon goods or their component parts.⁹⁹ Again, this is a factor which may have had little or no effect on prices at the time the parties entered into the agreement. One way to protect against these government related contingencies is to include language in the index clause to the effect that, should there be a change in government policy or activity which significantly affects the seller's costs or the price to the

97. *Id.* at 746.

98. In *Shedd-Bartush Foods v. Commodity Credit Corp.*, 231 F.2d 555 (7th Cir. 1956), failure to include an index clause cost a government contractor (seller) over \$65,000 when Office of Price Administration regulations on the price of oleomargarine were unexpectedly lifted.

99. *McShain v. District of Columbia*, 205 F.2d 882 (D.C. Cir. 1953) (imposition of a new tax or increase in the rate of an existing tax does not ordinarily impair obligations under a contract).

buyer,¹⁰⁰ the entire agreement, or at least the price structure of the agreement, would be subject to renegotiation and, if necessary, submitted to a disinterested party for arbitration.

The second type of contingency which could alter the intended operation of an index clause involves events which affect the index itself. There are a number of events which may affect the intended operation of an index. First, the meaning of the terminology used in the index clause could change. For example, in *North Central Airlines, Inc. v. Continental Oil Co.*,¹⁰¹ involving a long term contract for the sale of fuel, the term "posted prices" took on a completely new meaning because of government imposition of two-tiered pricing. Although the events in *North Central Airlines* can also be classified under the preceeding section, one can readily imagine a situation in which a change in the meaning of key terminology in the index clause could result from factors other than governmental action. Closely related to changes in the meaning of terminology are changes in the way the index is calculated. While the manner in which an index is calculated may be particularly suitable to parties at the time the contract is entered into, a change in the method of calculating the index may later make it unsuitable.¹⁰² To protect against these two contingencies, the index clause should include a provision which states that any significant change in the meaning of the terminology used in the index clause or in the manner in which the index is calculated may be resolved by renegotiation or arbitration.

By far the most important contingent event to protect against in an index clause is the possible discontinuation of the publishing of the index. When an index ceases to be published, it may be replaced by a successor index, which may or may not be equivalent

100. Changes in government policy or activity which significantly affect the operation of an index clause must be distinguished from those which render an agreement commercially impracticable. The U.C.C. allows parties to avoid contractual obligations which have "been made impracticable by the occurrence of a contingency the non-occurrence of which was a basic assumption on which the contract was made" U.C.C. § 2-615(a) (1978 version) (emphasis added). It would be difficult to argue that contracting parties assumed that inflation would not occur, especially in light of the nominalistic principle which pervades the law; see note 2 *supra*. A clause which provides for renegotiation of a contract when changes in government policy or activity significantly affect the intended operation of an index clause should specify that "significantly affect" is a lesser standard than "commercially impracticable."

101. 574 F.2d 582 (D.C. Cir. 1978).

102. See *Eastern Air Lines Inc. v. Gulf Oil Corp.*, 415 F.Supp. 429 (S.D. Fla. 1975) (unprecedented imposition of "two-tiered" pricing in oil industry effectively operated as a change in the way oil prices were calculated; where parties had originally intended to share increases in the cost of crude oil, Eastern was now forced to bear the entire burden).

to the original index.¹⁰³ The chance of being discontinued may be rather remote for indices with a long history of publication; nevertheless, the possibility still exists. To protect against it, the index clause should stipulate that if the named index ceases to be published and there is a successor index, the successor index will automatically become the operative one, as long as it is substantially the same as the index originally agreed upon and includes prior value changes under the original index. The index clause should further provide that if there is no such successor index, the entire contract should either be renegotiated or terminated.¹⁰⁴ The parties might also specify which, if any, of the above conditions should be subject to arbitration.

Finally, some events may arise which affect the operation of the index formula. One such event, a change in the base year, occurs regularly with many of the indices published by the Bureau of Labor Statistics. Providing for changes in the base year is merely an arithmetic problem.¹⁰⁵ Another event related to the operation of the index formula is the possible decline in an index. This raises two questions for draftsmen: whether the index clause should be written so that it works in both directions; and, if so, whether dollar amounts owed under such contracts as indexed bonds and loans will be allowed to fall below the original dollar amount bargained for.¹⁰⁶ To avoid confusion in the case of a decline in the index, the index clause should specify whether and to what extent the obligation will diminish with declines in the index.

8. THE INDEX CLAUSE SHOULD INDICATE THE EFFECT
OF ADJUSTMENTS IN AMOUNTS OF MONEY OWED
UNDER SECURED OBLIGATIONS UPON PRIORITY OF
SUBSEQUENT LIENORS

Lenders will, of course, insist that a security agreement be drawn up giving them priority in certain collateral. But lenders should insist that both the security agreement and the index clause give them a priority interest in accordance with the continually

103. In *Simpson Bros., Inc. v. District of Columbia*, 179 F.2d 430 (D.C. Cir. 1949) a contract for the sale of milk included an index clause which set the price of milk at 90% of the maximum price set by the Office of Price Administration or its successors. When the government dissolved the O.P.A. and did not name a successor, seller could not demand price increases based on market prices.

104. Rosenn, *supra* note 11, at 945-46.

105. See the sample index clauses which follow this section.

106. Again, to increase the chance of such paper being considered negotiable, indexed commercial paper, by its terms, should not be allowed to fall below a stated dollar amount.

adjusted amount owed under the agreement. For example, if principal of a secured loan is indexed, and periodically the principal amount is increased through operation of the index, the lender will not only want his security interest to increase correspondingly, but will want any increases in his security interest to maintain the same priority as his original security interest. Whether the secured lender will maintain priority with respect to the entire indexed amount will be for the courts to determine, but a provision establishing such priority should be included in both the security agreement and in the index clause to give the lender the best chance of successfully claiming priority.

C. Sample Index Clauses

As noted above, index clauses can be drafted in any of a variety of ways. For purposes of illustration, however, several possible clauses have been set out in the margin.¹⁰⁷

107.

LONG TERM LEASE AGREEMENT

[This lease shall run for ____ yrs.] For the first year, annual rent shall be \$(initial agreed upon amount) payable in equal monthly installments of \$(init. amt./12); after the first year, annual rent for each subsequent year shall be computed as follows: \$(init. amt.) times (the last (index)* computed by (appropriate agency) prior to the 15th day before the end of the lease year divided by the latest (index) on the date this lease agreement was executed) UNLESS there has been any change in the base year for the (index) subsequent to the date this agreement was executed, in which case the annual rent for each year subsequent to the change in the base year shall be: \$(init. amt.) times ((the last calculated (index) before change of the base year divided by the (index) at the time the agreement was entered into) plus (the last (index) computed prior to the 15th day before the end of the lease year divided by the new (index) base number)).

* (Include here a precise description of the index indicated above. For example, if "CPI" were typed into the appropriate spaces above, one would indicate here that the version of the Consumer Price Index that the parties have agreed upon is the national version which encompasses all items the Bureau of Labor Statistics uses in computing the index.)

LOANS

Borrower promises to repay the obligation evidenced by this agreement according to the following formula:

Principal Obligation.

At the end of each (6 calendar months) the principal amount owed will be recalculated as follows: new principal amount = \$(original amount loaned) less amount paid to date) times (latest (index)* calculated by the (appropriate agency) prior to 10 days before the end of the preceding (6 calendar months) divided by the latest (index) on the date this loan agreement was executed) UNLESS the base year for . . . [See LEASE AGREEMENT *supra*].

Interest Charge.

The rate of interest charged under this agreement shall not vary, but the amount of interest payable under this agreement may vary with changes in the principal amount owed, as computed under the index formula above. For the first (6 calendar months) of this agreement, interest shall be paid in accordance with the following schedule:

(Include here a standard (unadjusted) rate payment table showing payments commensurate with the initial principal amount and interest rate.)

After the first (6 calendar months) the amount of interest owed shall be based on the new principal amount determined above every (6 calendar months) at the rate of (agreed upon interest rate)% per annum. A schedule of the amounts of interest and principal to be paid each month of each subsequent (6 month) period shall be furnished by the lender to the borrower at least 3 business days before the next payment is due.

LONG TERM CORPORATE OR MUNICIPAL BOND

XYZ Company hereby promises to pay (name) (or bearer of this instrument) on (maturity date) 19___ the sum of money equal to the purchasing power of \$(face amount) measured at the time this instrument matures according to the index formula below, BUT the sum of money owned during the life of this instrument and at maturity shall at no time be less than \$(face amount). XYZ Co. further promises to pay interest to (name) (or bearer) at the rate of (interest rate agreed to)% per annum; stated interest rate to remain constant, but interest payments computed and owing under above stated interest rate to vary according to periodic adjustments in principal owed pursuant to index formula below.

The principal amount owed under this obligation shall be equal to: \$(face amount) times (the latest (index) published prior to the seventh day before: Any interest payment is due under this agreement and/or the maturity date of this instrument) divided by (the (index) last computed prior to execution of this instrument) UNLESS there has been a subsequent change in the base year.

For other examples of indexed agreements, see Dawson & Coultrap, *supra* note 37, at 696-97; Comment, *supra* note 23, at 976-80.